

ATMI-660
CUSTOMER ID NO. 25559

AMENDMENTS TO THE SPECIFICATION

On page 12, please delete paragraph [0025].

Please replace paragraph [0013] with the following replacement paragraph:

With reference to Figure 1, there is shown a two-stage ~~reactive~~ reactor 10 representative of the system described herein. There is shown an upper reaction chamber 12 and a lower reaction chamber 14. The upper reaction chamber includes at least one waste gas inlet 15 for introducing the gaseous waste stream. In this embodiment, there are additional independent gas inlets 16 and 17 for the introduction of additional flammable gases or oxidants to provide a fuel rich gas mixture and thereby increasing the combustion temperature within the system for destruction of resistant contaminants.

Please replace paragraph [0044] with the following replacement paragraph:

[0044] ~~Figure 4 illustrates the liquid vortex 33 of the present invention.~~ With reference to Figure 1, ~~The~~ the reacted gases exit the upper reaction chamber at the bottom of the chamber through a vortex of cooling water. ~~As shown in Figure 4, the~~ The water vortex unit generally comprises a top plate 50, an outer shell 36 and a generally cone-shaped baffle 40. The outer shell 36 comprises a liquid inlet 38. The liquid inlet 38 is arranged in relation to the outer shell 36 such that as liquid is introduced tangentially into the outer shell 36, the concentric chamber 37 is filled with liquid to create a swirling motion, causing the liquid to rise and overflow the cone-shaped baffle to form a laminar sheet of fluid on the inner surface of the baffle that flows downwardly onto the interior surface of the gas stream flow chamber 39, thereby cooling the interior surface and reducing deposition of particulates thereon.

JUN. 2. 2004 12:12PM

ATMI LEGAL FAX 203-797-2544

NO. 0479 P. 16/18

ATMI-660
CUSTOMER ID NO. 25559

IN THE DRAWINGS

Please replace Figure 1 with the enclosed replacement sheet. The changes made are shown in red.